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EXAMINER	
YAARY, MICHAEL D	
ART UNIT	**PAPER NUMBER**
2196	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	10/681,861	LILLEY, PATRICK C.
	Examiner	Art Unit
	Michael Yaary	2196

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

1. Claims 1-28 are pending in the application

Claim Objections

2. Claim 17 is objected to as lacking antecedent basis for "the receiver" in line 5.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 15,16, 20, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Bernstein et al. (hereafter Bernstein)(US Pat. 6,970,189).

Regarding claim 15, Bernstein discloses a system for optimizing distribution of information (abstract) comprising: a first electronic device capable of at least generating and sending digital information (digital camera 22 of figure 1and figure 5 and column 2, lines 21-25);

A second electronic device capable of at least receiving, regenerating and storing digital information (server 12 of figure 1 and figure 5, column 2, lines 21-25, and column 8, lines 1-5); and the first and second electronic devices employing at least one universal dictionary to at least store, retrieve, and manage digital information (database 14 of figure 1, column 3, lines 23-27, & column 4, lines 16-20 disclose a database of information that will be used for communication between a server and camera. *Examiner notes that the specification does not contain specific definition for the term universal dictionary or that it bears specific meaning to one of ordinary skill in the art. The examiner is therefore interpreting a universal dictionary as a container or database storing relevant information to be accessed.)*

Regarding claim 16, Bernstein discloses the first electronic device is a digital camera (digital camera 22 of figure 1 and figure 5).

Regarding claim 20, Bernstein discloses the second electronic device comprises a photo server (server 12 of figure 5 and column 2, lines 21-25).

Regarding claim 25, Bernstein discloses the at least one universal dictionary is shared by the first and second electronic devices (figure 1, and column 3 lines, 10-15 disclose information stored in a database that is used by both the first and second electronic devices.)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulkarni et al. (hereafter Kulkarni)(US Pat. 6,775,423) in view of Stupek, Jr. et al. (hereafter Stupek) (US Pat. 5,974,454).

Regarding claim 1, Kulkarni discloses a method for optimizing distribution of information (abstract) comprising: generating update information (column 4, lines 27-30 disclose generating a difference file of information to be sent to a remote device. This difference file is the update information sent.); communicating the update information to a remote device, (Column 4, lines 30-31); and communicating a reduced amount of data to the remote device (Column 4, lines 41-42).

Kulkarni teaches all the limitations of claim 1 but is silent to using a universal dictionary as the basis of generating and communicating the information.

Stupek however, discloses using a universal dictionary in generating and communicating information (column 3, lines 18-52 disclose the method of which resources such as firmware and software applications are provided to client computers or remote devices. Column 3, lines 45-52 disclose how all this is done based on a universal dictionary or upgrade database that is implemented in the method.), thus reading on generating and communicating update information based on a universal dictionary.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kulkarni by employing some sort of database or repository as the base for generating and communicating information as taught by Stupek, for the benefit of keeping all data organized in one location and easily accessible for communication use.

Regarding claim 2, Kulkarni does not disclose the at least one universal dictionary comprises a universal dictionary employed by a sender and another universal dictionary employed by the remote device.

However, Stupek discloses a management information base, which is a database containing resource information. This database is employed by the server (sender) and the client (remote device) (item 81 in figure 11, and column 9, lines 42-50), thus reading on the at least one universal dictionary comprises a universal dictionary employed by a sender and another universal dictionary employed by the remote device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kulkarni by employing more than one universal dictionary (database) as taught by Stupek, in order to provide both sender and remote device an efficient means to store data to be used for communication.

Regarding claim 3, Kulkarni does not disclose the universal dictionary employed by the sender and the universal dictionary employed by the remote device comprising substantially identical information.

However, Stupek discloses a client (remote device) and a server (sender) each have a management information base containing the same resource information (column 9, lines 46-48), thus reading on the universal dictionary employed by the sender and the universal dictionary employed by the remote device comprising substantially identical information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kulkarni by having both universal dictionaries comprise substantially identical information as taught by Stupek, in order to maintain synchronization between both universal dictionaries.

Regarding claim 4, Kulkarni does not disclose the at least one universal dictionary comprises a universal dictionary shared by the sender and the remote device.

However, Stupek discloses the at least one universal dictionary comprises a universal dictionary shared by the sender and the remote device (column 3, lines 50-52 discloses the online service will provide the upgrade database (universal dictionary) to the remote device, showing that the database is shared by the sender and receiver.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kulkarni by sharing the database between the sender and remote device as taught by Stupek, in order to allow for efficient communication between the sender and remote device as both are able to access the same universal dictionary.

Regarding claim 5, Kulkarni disclose regenerating original data from a sender (column 5, lines 51-55 disclose a copy section in the difference file containing data found in both the original and new image. This data in the copy section sent is the original data.)

Kulkarni does not disclose using a universal dictionary to regenerate the original information from the update package.

However, Stupek discloses storing older revisions of an update after transmitting the package (column 5, line 64-column 6, line 42 disclose the user at the remote device always having access to original or previous versions of the resources.), thus reading on regenerating original data from an update package using a universal dictionary.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kulkarni by using a database as the basis of storing original or previous update information as taught by Stupek, for the benefit of always being able to access the original data at a later time (Stupek column 5, lines 66-67).

Regarding claim 6, Kulkarni discloses comparing information contained in at least a pair of binary images (column 5, lines 39-50) and deriving difference information from the compared information (column 5, lines 39-50).

Kulkarni does not disclose creating an update package comprising the derived difference information, sending the update package to a universal dictionary accessible by the remote device, and updating the universal dictionary accessible by the remote device with the update package.

However, Stupek discloses creating upgrade packages to be transmitted (column 3, lines 38-43), thus reading on creating an update package comprising the derived difference information. Stupek also discloses sending an upgrade package to a package directory to be accessed by the remote device, (column 5, lines 48-56), thus reading on sending the update package to a universal dictionary accessible by the remote device. Stupek also discloses a description database that is continuously updated with information regarding the upgrade packages that are sent (column 7, lines 36-44), thus reading on updating the universal dictionary accessible by the remote device with the update package.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kulkarni by creating an upgrade package to be transmitted, sending the upgrade package to a directory (database), and updating the database as taught by Stupek, for the benefit of creating an efficient way to analyze and communicate data.

Regarding claim 7, Kulkarni further discloses the derived difference information at least comprises a set of instructions and associated data (column 5, lines 51-59).

Regarding claim 8, Kulkarni further discloses the set of instructions comprises at least one program instruction selected from: copy; duplicate; set; reference location call; and delete (column 5, lines 45-47 and 54-55 discuss copy being implemented).

Regarding claim 9, Kulkarni does not disclose generating a plurality of update packages, analyzing the update packages to determine differences in at least two universal dictionaries, communicating the difference information to the at least two universal dictionaries, and synchronizing the at least two universal dictionaries.

However, Stupek discloses generating a plurality of update packages (column 3, lines 38-43). Stupek also discloses analyzing the upgrades from the upgrade database to determine differences between the upgrade resources and the resources on the remote device (column 4, lines 12-33). By analyzing and comparing, differences in the universal dictionaries are found thus allowing the appropriate difference information and upgrade information to be communicated. Stupek also discloses communicating the difference information to the at least two universal dictionaries (column 5, lines 40-62 disclose grouping several upgrade packages and sending the information to a target server, and to a package directory column 5, lines 40-62). Stupek also discloses an upgrade database actually comprising three databases that are linked (column 6, line 59-column 7, line 65), thus reading on synchronizing the at least two universal dictionaries.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kulkarni by generating a plurality of upgrade packages, analyzing the upgrade packages, sending the information to multiple universal dictionaries, and synchronizing the dictionaries as taught by Stupek, for the benefit of creating an efficient way to analyze and communicate multiple packages of data.

Regarding claim 11, Kulkarni does not disclose the update information comprises an update package.

However, Stupek discloses the distribution of upgrade packages to update resources of a computer (column 3, lines 36-43), thus reading on update information comprises an update package.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kulkarni by distributing upgrade packages as taught by Stupek, for the benefit of allowing the receiver to obtain certain packages containing pertinent grouped data that is needed.

7. Claims 12-14, 17-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein in view of Mead (US Pat. 6,683,993).

Regarding claim 12, Bernstein discloses a method for optimizing distribution of information between an electronic device and a server (column 2, lines 21-25), the method comprising: accessing at least one universal dictionary by the electronic device and the server (database 14 of figure 1, column 3, lines 23-27, & column 4, lines 16-20 disclose a database of information that will be used for communication between a server and camera.)

Bernstein does not disclose the method comprising: generating at least one optimized photo information package using the reference frame of photos; communicating the at least one optimized photo information package from the electronic device to the server; receiving the at least one optimized photo information package at the server; and regenerating the new photo from the at least one optimized photo information package; and storing the regenerated photo in storage.

However, Mead discloses generating at least one optimized photo information package using the reference frame of photos (column 3, lines 8-12 disclose using the object library contents to match unrecognized components of the input signal). Mead also discloses communicating the at least one optimized photo information package from the electronic device or transmitter (item 11, figure 1) to a receiver (item 13, figure 1) (column 3, lines 12-15). Thus, implementing the transmitter/receiver communication system in the camera/server system of Bernstein would read on communicating the at least one optimized photo information package from the electronic device to the server. Mead also discloses receiving the at least one optimized photo information package at the receiver (figure 1 shows the communication means and column 3, lines 12-15). This transmitter/receiver system implemented in the system of Bernstein would allow for communicating and receiving at a server, thus reading on receiving the at least one optimized photo information package at the server. Mead also discloses regenerating the new photo from the at least one optimized photo information package (column 3, lines 15-18); and storing the regenerated photo in storage (column 5, lines 49-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein's camera/server system by generating at least one optimized photo information package using a reference frame of photos, communicating the at least one optimized photo information package from the electronic device to a receiver, receiving the at least one optimized photo information package at a receiver, and regenerating and storing the new photo as taught by Mead, in order to effectively transmit data at a lower bit rate occupying less storage space (Mead, column 1, lines 46-50).

Regarding claim 13, Bernstein does not disclose generating at least one update package in the electronic device, the at least one update package comprising optimized photo information; communicating the at least one update package from the electronic device to the server; processing the at least one update package; and regenerating a copy of the new photo based upon information in the at least one update package

However, Mead discloses generating at least one update package in the electronic device, the at least one update package comprising optimized photo information (column 3, lines 8-12 disclose using the object library to match unrecognized components of the input signal). Mead also discloses communicating the at least one update package from the electronic device (item 11, figure 1) to the receiver (item 13, figure 1)(column 3, lines 12-15). Thus, implementing the transmitter/receiver communication system in the camera/server system of Bernstein would read on communicating the at least one optimized photo information package from the electronic device to the server. Mead also discloses processing the at least one update package (decoder 14 of figure 1, and column 3, lines 15-18 disclose processing at the decoder after transmitting the information to the receiver.). Mead also discloses regenerating a copy of the new photo based upon information in the at least one update package (column 3, lines 15-18 disclose reconstructing the transmitted signal using the object library at the receiver.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein's camera/server system by generating at least one update package, communicating the at least one update package, processing the at least one update package, and regenerating a copy of the new photo as taught by Mead in order to effectively transmit data at a lower bit rate occupying less storage space (Mead, column 1, lines 46-50).

Regarding claim 14, Bernstein does not disclose generating a plurality of update packages; transferring the at least one of the plurality of update packages to at least one processing device; processing the at least one update package by compressing the photo information contained in the at least one update package such that the photo information comprises a reduced quantity of memory; transferring the at least one update package to the photo server; regenerating at least one photo using the compressed photo information in the at least one update package; and storing the at least one regenerated photo, whereby the at least one regenerated photo occupies less memory than the initial quantity of memory.

However, Mead discloses generating a plurality of update packages (column 5, lines 13-25 disclose classifying an at least one object from a set of objects in the library. Also comparing one or more feature quantities to stored generic objects and updating accordingly). Mead also discloses transferring the at least one of the plurality of update packages to at least one processing device (column 3, lines 12-15 disclose transmitting the updated object to a decoder). Mead also discloses processing the at least one update package by compressing the photo information contained in the at least one update package such that the photo information comprises a reduced quantity of memory (column 1, lines 47-51). Mead also discloses transferring the at least one update package to a receiver (item 13 of figure 1 and column 3, lines 12-15). Thus, implementing the transmitter/receiver communication system in the camera/server system of Bernstein would read on communicating the at least one optimized photo information package from the electronic device to the server. Mead also discloses regenerating at least one photo using the compressed photo information in the at least one update package (column 3, lines 15-18). Mead also discloses storing the at least one regenerated photo (column 5, lines 49-50), whereby the at least one regenerated photo occupies less memory than the initial quantity of memory (column 1, lines 47-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein's camera/server system by generating a plurality of update packages, transferring the at least one of the plurality of update packages to at least one processing device, processing the at least one update package, regenerating at least one photo, and storing the at least one regenerated photo as taught by Mead, in order to create a camera/server system that effectively transmits data at a lower bit rate occupying less storage space (Mead, column 1, lines 46-50).

Regarding claim 17, Bernstein discloses the digital camera at least comprises: Image acquisition circuitry for acquiring digital photographic information (figure 5, imaging device 82); communication agent for communicating with external devices (figure 5, transceiver 24); and previously acquired digital photographic information (column 4, lines 6-7 disclose the photographic information being sent to the camera).

Bernstein does not disclose the digital camera comprises a generator for generating an update package to be communicated to the receiver, and a reference frame of photos.

However, Mead discloses an encoder used in the method of matching up objects based in a library of objects with objects that are missing from the original signal and to transmit the original objects from the signal and missing objects found in the library (column 3, lines 6-12), thus can be interpreted as being a generator and reads on a generator for generating an update package to be communicated to the receiver. Mead also discloses a library containing a set of generic objects used as a reference for object comparisons (column 2, lines 6-7), thus reading on the digital camera comprises a reference frame of photos.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein by including a reference frame of photos and transmitting an update package from a generation method as taught by Mead, for the benefit of allowing a digital camera to efficiently transmit relevant information as necessary at a reduced bit rate.

Regarding claim 18, Bernstein does not disclose that the generator processes the previously acquired digital photographic information by comparing the previously acquired digital photographic information to the reference frame of photos and generating an update package to be communicated to the receiver comprising information from the reference frame and the previously acquired digital photographic information.

However, Mead discloses segmenting an input signal and matching up objects that are not found in the input signal with objects that have been previously stored in the library (column 3, lines 6-18), thus reading on the generator processes the previously acquired digital photographic information by comparing the previously acquired digital photographic information to the reference frame of photos and generating an update package to be communicated to the receiver comprising information from the reference frame and the previously acquired digital photographic information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein et al. by matching up objects that are not found in the input signal with objects contained in a library as taught by Mead, for the benefit of creating the most relevant and suitable update packages.

Regarding claim 19, Bernstein discloses digital photographic information corresponding to a particular digital camera (Column 11, lines 42-47).

Bernstein does not disclose that the digital photographic information corresponding to a particular digital camera is contained in the reference frame of photos.

However, Mead discloses a reference frame (common, generic objects contained in the library) that is used for comparison with an input signal (column 3, lines 8-12). Thus, the reference frame in the library can contain multiple types of information including particular digital camera information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein by including a reference frame of photos, as taught by Mead, for the benefit of storing important information relating to specific digital cameras.

Regarding claim 21, Bernstein discloses a communication agent for at least receiving digital photographic information from the first electronic device (transceiver 20 of figure 1).

Bernstein does not disclose that the photo server comprises an update agent for at least generating a local copy of the previously acquired digital photographic information; a processor for processing digital photographic information; and memory for storing digital photographic information.

However, Mead discloses the information that has been transmitted to the receiver is reconstructed at the receiver (figure 1 discloses the method at the receiver 13 of reconstructing the input), thus reading on generating a local copy of the previously acquired digital photographic information. Mead also discloses a processor for processing digital photographic information (column 3, lines 15-18 disclose the decoder at the receiver that processes the information that was transmitted.), thus reading on a processor for processing digital photographic information. In addition, Mead discloses an electronic storage device such as EEPROM of the receiver (column 5, lines 49-50), thus reading on memory for storing digital photographic information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the camera/server system of Bernstein by reconstructing a copy of the previously acquired information, processing the digital photographic information, and memory for storing the digital photographic information as taught by Mead, for the benefit of creating efficient transmission of information to a photo server.

Regarding claim 22, Bernstein does not disclose the photo server comprises a plurality of reference frames of photos, each reference frame corresponding to at least one particular first electronic device. However, Bernstein further disclose the photo sites connected to the server each comprise a plurality of reference frames of photos, or different information blocks compatible with multiple types of digital cameras (items 18a and 18b of figure 10 and column 11, lines 35-49), thus reading on the photo server comprises a plurality of reference frames of photos, each reference frame corresponding to at least one particular first electronic device.

Regarding claim 23, Bernstein does not disclose the at least one universal dictionary further comprises a first universal dictionary employed by the first electronic device and a second universal dictionary employed by the second electronic device.

However, Mead discloses the sender and receiver each comprising an object library storing objects and code regarding audio, speech, video, and graphical signals (object libraries 22 and 32 of figure 1), thus reading on a first universal dictionary employed by the first electronic device and a second universal dictionary employed by the second electronic device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein by including an object library (universal dictionary) for both sender and receiver as taught by Mead, in order to provide both electronic devices with efficient means of storing data to be used for communication.

Regarding claim 24, Bernstein does not disclose the first universal dictionary and the second universal dictionary contain substantially identical information.

However, Mead discloses using the first library at the first device when sending the signal and reconstructing the same signal at the receiver using the second library (column 3, lines 6-18). Both libraries, therefore, contain identical information in order to transmit and reconstruct the same signal, thus reading on the first universal dictionary and the second universal dictionary containing substantially identical information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein by incorporating substantially identical information at both libraries (universal dictionaries) as taught by Mead, in order to maintain synchronization between both universal dictionaries.

8. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein in view of Kulkarni.

Regarding claim 26, Bernstein does not disclose a flash image server to provide optimized digital information to a flash memory when an electronic device may be initially flashed with a memory image.

However, Kulkarni discloses creating a new image in flash memory of an electronic device (column 2, lines 35-39), thus reading on providing optimized digital information to a flash memory when an electronic device may be initially flashed with a memory image.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein by providing digital information to a flash memory, as taught by Kulkarni, for the benefit of providing an efficient non-volatile means of storage.

Regarding claim 27, Bernstein does not disclose a flash manager to initialize an electronic device a first time the electronic device is flashed.

However, Kulkarni discloses a bootloader stored in the device (column 5, lines 1-5), thus reading on a flash manager to initialize an electronic device a first time the electronic device is flashed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein by implementing a bootloader for initialization as taught by Kulkarni, in order to successfully provide initialization to an electronic device.

Regarding claim 28, Bernstein does not disclose a flash update driver employed by the flash manager to embed a new image onto the flash memory, which may be employed by a processing circuitry operating the electronic device.

However, Kulkarni discloses using a flash manager to allow the new image to be built incrementally until the image is written to flash memory (column 2, lines 42-63), therefore embedding the new image into memory. Thus reading on a flash update driver employed by the flash manager to embed a new image onto the flash memory, which may be employed by a processing circuitry operating the electronic device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bernstein et al. by using a flash manager to incrementally build the new image that will be written to flash memory as taught by Kulkarni, in order to maintain an well-structured way of embedding new images to memory.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kulkarni in view of Stupek and further in view of Mead.

Regarding claim 10, Stupek further discloses sharing the random data with a plurality of sender/receiver pairs (column 3, lines 18-19).

Kulkarni and Stupek do not disclose comparing random data associated with a plurality of information packages to be transmitted, compressing the random data based upon contents of the plurality of information packages, and synchronizing the at least one universal dictionary associated with a sender/receiver pair based upon the compressed random data.

However, Mead discloses classifying objects by comparing features of at least one object to features of the generic objects (column 5, lines 13-19), thus reading on comparing random data. Mead also discloses compressing the random data (column 1, lines 47-51). In addition, Mead discloses both libraries (universal dictionaries) at the sender and receiver contain the same information used to transmit, receive, and reconstruct the signal (column 3, lines 6-18). Thus reading on synchronizing the at least one universal dictionary associated with a sender/receiver pair.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kulkarni et al. and Stupek by comparing random data, compressing the random data, and synchronizing the at least one universal dictionary as taught by Mead, for the benefit of providing a well organized and efficient method of communicating data between a sender and a receiver.

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Yaary whose telephone number is (571) 270-1249. The examiner can normally be reached on Monday-Friday, 8:00 a.m - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nabil El-Hady can be reached on (571) 272-3963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M.Y.

N. ElHady

NABIL M. EL-HADY
SUPERVISORY PATENT EXAMINER